5

10

ABSTRACT

A system and device for blocking fraudulent special service calls in a long distance telephone system is disclosed. The Automatic Number Identifiers (ANIs) of originating numbers within Local Exchange Carriers (LECs) are blocked from calling certain special service call numbers by including the ANI in the special service call number record in the long distance carrier's Service Management System (SMS) database. ANIs to be blocked are selected by fraud control based on certain network traffic flow thresholds. When the switching elements in the long distance carrier retrieve an SMS record for a particular special service call, it is determined whether the origin of the call corresponds to an ANI in the SMS record. If it does, the call is blocked.